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ABSTRACT

Four Mexican-American groups were administered the Attitude Behavior Scale-Mental Retardation (ABS-MR). These included: (1) 50 Special Education and Rehabilitation Workers; (2) 50 parents of mentally retarded children; (3) 50 regular school teachers; and (4) 82 parents of the nonretarded. The purposes were: (1) to investigate their attitudes toward the mentally retarded; and (2) to assess the predictive validity of hypothesized determinants of attitudes, including demographic, socio-psychological, contactual, and knowledge factors. The Guttman conceptual facet analysis scheme was applied toward the goal of credibility of results. Eleven hypotheses were presented, ten of which dealt with certain variables which were predicted to relate to attitudes toward mental retardation. Results were presented and discussed. (TL)

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ATTITUDES OF TEXAS MEXICAN-AMERICANS  
TOWARD MENTAL RETARDATION:  
A GUTTMAN FACET ANALYSIS

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Americans, are becoming frustrated by the attitudinal, educational, and economic conditions that tend to perpetuate a discrimination that fosters and maintains problems such as mental retardation. (Mittelbach, 1967; Rubel, 1966.)

Statement of Problem

One major aim of this study was to investigate the predominant value orientations and attitudes held by four Mexican-American groups toward the mentally retarded. These included Special Education and Rehabilitation workers, Parents of the Mentally Retarded, Regular School Teachers, and Parents of the Nonretarded. Another purpose was to assess the predictive validity of hypothesized determinants of attitudes, including demographic, socio-psychological, contactual, and knowledge factors. Although these substantive aims are important, credibility of the results depends on the adequacy of the measurement base upon which the results stand. In order to research the problems which have been leveled at attitudinal research in the past, Jordan (1968) has applied and extended the conceptual facet analysis scheme set forth by Guttman.

### Method

#### Subjects

The present study used a sample from the Mexican-American population in Texas composed of the following four groups:

- (a) 50 Parents of Mentally Retarded Children
- (b) 50 Special Education and Rehabilitation Workers
- (c) 50 Regular School Teachers
- (d) 82 Parents of the Nonretarded

Selection of these four groups, whose attitudes were important in respect to the education, employment, and general well being of the mentally retarded, were chosen to make this study comparable to others in the comprehensive international study.

The border area of Texas from which the sample was drawn has a high concentration of Mexican-Americans. Persons familiar with the several border areas volunteered to help in obtaining the sample from each of the four groups cited above. Random sampling was not used because of the difficulty in obtaining cooperation from members of the four groups, especially the parents of the retarded. Representativeness was approached by sampling different sections of the community in the case of the parents of the mentally retarded (PMR) and parents of the non-retarded (PNR) groups; and sampling several different schools in the case of the special education-

rehabilitation personnel (SER), and the regular teachers (RST). In terms of representativeness, the areas sampled have a high proportion of Mexican-Americans, 88% of some areas being populated by persons with Spanish surnames.

#### Instrumentation

The Attitude Behavior Scale - Mental Retardation, as explained earlier by Dr. Jordan, consists of six levels, each corresponding to a certain level of the hypothesized attitude universe. Included in the attitude scale were items that tapped the predictor variables of the study which Jordan (1968) has labeled determinants of attitudes - demographic, sociopsychological, contactual, and knowledge.

Tests of reliability and validity, as stated earlier by Dr. Jordan, have shown consistently that the ABS-MR is a sound criterion on which to base predictions.

#### Hypotheses of the Study

The variables in this study were intercorrelated to enable examination of relationships for both content and intensity scores of the criterion (ABS-MR) across each level (including total scores) with 29 independent variables. This facilitated testing of the following hypotheses.

Relating Attitudes  
and Values

H-1.--Persons who score high in efficacy will score high in positive attitudes toward the mentally retarded on each of the six levels as well as the total score on the ABS-MR.

Relating Attitudes  
and Knowledge

H-2.--Persons who score high in knowledge about mental retardation will score high in positive attitudes toward the mentally retarded on each of the six levels as well as the total score on the ABS-MR.

Relating Attitudes  
and Contact

H-3.--The more frequent the contact with mentally retarded persons the higher will be the intensity scores on each of the levels of the ABS-MR.

H-4.--High frequency of contact with mentally retarded persons will be associated with favorable attitudes toward the mentally retarded on each of the levels of the ABS-MR if high frequency is concurrent with (a) alternative rewarding opportunities, (b) ease of avoidance of the contact, and (c) enjoyment of the contact.

Relating Attitudes and  
Demographic Variables

H-5.--Amount of education will be positively related to favorable attitudes toward the mentally retarded.

H-6.--Age will be positively related to favorable attitudes toward the mentally retarded.

H-7.--Women will score higher on positive attitudes toward the mentally retarded than will men.

Relating Attitudes to  
Opinions on Educational  
Aid and Planning

H-8.--Agreement with government aid to education will be positively related to favorable attitudes toward the mentally retarded.

H-9.--Agreement with centralized government planning of education will be positively related to favorable attitudes toward the mentally retarded.

Relating Attitudes and  
Group Membership

H-10.--The research groups will assume the following order with respect to favorable attitudes toward the mentally retarded: Teachers of the Mentally Retarded, Parents of the Mentally Retarded, Regular Teachers, Parents of the Non-Retarded.

Relating Attitudes and  
Multidimensionality

H-11.--The ABS-MR scale levels or attitude sub-universes will form a Guttman Simplex for each of the sample groups.

## Results

### H-1: Relating Attitudes and Values

The data as presented in Table 1 show there is no relationship between attitudes held by the four Mexican-American groups and degree of control they feel they have over their environment.

### H-2: Relating Attitudes and Knowledge

The amount of knowledge held by the total sample of Mexican-Americans was positively correlated with the total score on the ABS-MR to a significant degree (Table 2). Also, the total group's responses to levels 2, 3, and 4 were significantly related to amount of knowledge in a positive direction. The Mexican-American SER group obtained a significant positive correlation between amount of MR knowledge and levels 1, 2, 3, and 4 as well as the total score on the ABS-MR. Although the PMR showed no significant relationship between attitude content and knowledge, Table 3 reveals a significant positive relationship between amount of knowledge and levels ~~4, 5, 6~~<sup>1</sup>, and total score for the ABS-MR intensity scale. H-2 was supported.

### H-3 and H-4: Relating Attitudes and Contact

Table 4 reveals the ABS-MR (Intensity) Personal Action level correlated positively and significantly with the amount of contact the total group had with the mentally retarded. Table 4 points up some unexpected between-group

differences. The SER and PMR groups received a significant negative correlation between the amount of contact and attitude intensity for levels 6 and 1 respectively while the RST and PNR groups obtained significant correlations in the predicted direction for level 6 attitude intensity. H-3 was confirmed based on the total group comparison.

The hypothesis for contact and favorableness of attitudes toward the mentally retarded was supported in that the multiple correlation coefficient for the total groups, comparing all contact variables (see variable list, Table 10) with the total ABS-MR (Table 5), indicated a high positive relationship. Comparing all contact variables with specific ABS-MR levels for the total groups (Table 5) reveals the personal feeling and action levels of the attitude continuum as being most related to contact.

The partial correlation coefficients for the contact variables, using the total group for comparison (Table 5) denotes a significant negative correlation between the ABS-MR personal action level and frequency of contact with the mentally retarded. The HP avoidance and MR enjoyment variables were positively correlated ( $p < 0.005$  and  $p < 0.1$  respectively) with the ABS-MR personal action level; however, the alternative rewarding opportunities variable was not concurrent as required by H-4. Although the relationships did not approach significance (Table 5), all but one ABS-MR level by MR

amount comparisons resulted in negative correlations.

The SER and PMR Multiple R's (Tables 6 and 7) between contact and attitudes were positive and significant. The personal feeling and action levels of the ABS-MR were the levels found to be significantly related to contact.

The RST and PNR Multiple R's (Tables 8 and 9) revealed the more stereotypic levels of the ABS-MR were significantly related to contact in a positive direction.

Partial correlations between individual predictor contact variables and attitudes revealed three significant relationships for the RST group (Table 8). The relationships were between the crucial indicator variables as stated in H-4 and progressively more action oriented levels of the ABS-MR. MR enjoyment significantly related to the societal normative level, HP alternatives significantly related to the personal moral evaluative level, and HP avoidance significantly related to the personal action level. This progression makes psychological sense but frequency of contact per se is not related to any of the ABS-MR levels in this comparison.

#### H-5, 6, and 7: Relating Attitudes and Demographic Variables

The data indicate, when the whole sample is considered, there are no significant relationships between amount of education and the total ABS-MR attitude levels (Table 9). The data indicate (Table 11) although the PMR group

had less than a high school education they had the most positive attitudes toward the retarded on every level of the ABS-MR.

The significant positive relationship (Table 10) between age and the stereotypic level for the total group lends support to hypothesis H-6. A correlation of .31 between age and the stereotypic level of the ABS-MR was significant for the SER group. These findings point up the strength of using facet analysis in scale construction. The ability to tap different levels of an attitude gives the researcher more understanding of the relationships between certain variables. In regard to H-6, increases in age may influence the knowledge or awareness of a person to how others view the mentally retarded (stereotypic level) but have no effect on that individual's own personal behavior. H-6 was confirmed.

The multiple means test for hypothesis 7 indicates (Table 11) that Mexican-American men had significantly more positive stereotypic attitudes than Mexican-American women, a finding opposite to that predicted. The adjusted mean of 35 for the 76 males was significantly greater than the adjusted mean of 33 for the 150 females. Although males are more aware of other persons' attitudes toward the mentally retarded, the sexes in the present sample do not differ at the more personal or behavioral end of the attitude spectrum. Hypothesis 7 was not confirmed.

H-8 and 9: Relating Attitudes to Opinions on Educational Aid and Planning

The results, as indicated in Tables 12 and 13, confirm H-8 and partially confirm H-9. Agreement with government aid to education (Table 12) was significantly related to favorable attitudes toward the mentally retarded for each group plus the total sample. However, the relationship between control of educational planning as it relates to attitudes toward the retarded is less clear (Table 13). The PMR and RST group's opinion that there should be centralized planning is significantly related to positive attitudes toward the retarded. The negative correlation between educational planning and attitudes for the SER group is contrary to that predicted. The mean SER coded score for educational planning was 3 which means local control.

H-10: Relating Attitudes and Group Membership

An analysis of variance, as depicted in Table 11, failed to confirm hypothesis 13. The four group means of all levels of the ABS-MR plus the total ABS-MR were significantly different but the order of group favorableness was: PMR > SER > RST > PNR.

H-11: Relating Attitudes and Multidimensionality

The result from the four sample groups (Table 12) <sup>4</sup> form an approximate simplex as predicted. Examination of Matrices 31.1, 31.3, 31.5, and 31.7 in Table 12 indicates that correlations between the six levels decrease in relation to the number of steps two levels are removed from each other.

## Discussion

### Relating Attitudes and Values

H-1. --The value variable of "Efficacy" purported to measure the amount of control one feels he has over his environment. The failure of the attitudes of the four Mexican-American groups to correlate significantly with the Efficacy scale (content) led to the rejection of the research hypothesis. The responses of the total group fell in the middle of the continuum of scores on the scale. This may reflect an important finding in terms of a change from a fatalistic outlook on life and the lack of control over it to a movement toward the center of the environmental control continuum.

### Relating Attitudes and Knowledge

H-2. --The data supported H-2 at certain attitude levels.

An inspection of the individual levels of the ABS-MR in relation to knowledge reveals the necessity for caution in interpreting positive findings, and again, gives added strength to the use of facet analysis. Factual knowledge is cognitive in nature and does not necessarily result in positive attitudes at the behavioral or action level. The levels of the ABS-MR that were significant in relation to knowledge were levels 1, 2, 3, and 4. These levels are more cognitive in nature and less personal or behavioral. This confirms Jordan's (1969) contention that amount of knowledge per se does not necessarily lead to positive action.

### Relating Attitudes and Contact

H-3 and 4.--As was expected, the more contact a person has with the mentally retarded the more intense or certain that person will be about his attitudes toward the mentally retarded. This interpretation is based on the MR contact by total ABS-MR attitudes intensity comparison for the total group.

The data indicate that greater contact results in less dogmatic or more flexible attitudes toward the retarded while less contact results in more rigid attitudes toward the retarded.

The data relating attitudes to contact give added weight to the assertion that over-all contact is an important determinant of attitudes. Contact is a behavioral indicant and the sensitivity or ability of the ABS-MR to tap this behavioral determinant is pointed out by the fact that, based on multiple R's for the total group, the more personally active or behavioral action levels of the ABS-MR were significantly related to contact.

Those groups obviously more involved with the retarded (SER and PMR) have more positive personal behavioral attitudes while those groups less personally involved (RST and PNR) have more positive stereotypic attitudes. Again, the ability of ABS-MR to discriminate between the level or quality of attitudes held by different groups is given further support.

The contact variables most conducive to and predictive of favorable attitudes were alternative rewarding opportunities, ease of avoidance, and enjoyment of the contact.

Relating Attitudes and Demographic Variables

H-5, 6, and 7.-- Age was the only demographic variable to be confirmed. Increasing age was associated with more positive stereotypic attitudes which replicates the findings of Jordan (1968, 1969). The older a person becomes is related to a greater awareness of what others believe to be true about the retarded but has little effect on the actions or behaviors of that person toward the retarded.

Relating Attitudes to Opinions on Educational Aid and Planning

H-8 and 9.-- Agreement with government aid to education and local control of planning was predictive of positive attitudes toward the mentally retarded. Those border areas sampled were in dire need of federal assistance. The responses made by the four groups reflect an awareness of the educational, social, economic, and political gains that can result from federal support. However, in order for federal programs to work effectively they must give local rehabilitation personnel more responsibility for program planning.

Relating Attitudes and Group Membership

H-10.-- H-10 was rejected. The order of group favorableness, PMR > SER > RST > PNR should have been anticipated based on the work of Greenbaum and Wang (1965) and the fact that Jordan (1968) did not include a sample from the parents of the retarded.

Table 11 shows the significant differences between groups increases, with respect to favorable attitudes, as the levels of the ABS-MR become more action oriented. Not only was the ABS-MR able to differentiate between groups of persons with varied backgrounds, but the six scale levels were obviously tapping different aspects of a person's attitude toward the retarded.

Relating Attitudes and Multidimensionality

H-11.--The acceptance of H-11 is evidence that attitudes are multidimensional. A person does not just have one attitude toward something (the old predisposition to react definition) but many attitudes depending on the perspective from which the object is being viewed.

Confirmation of H-11 can be viewed as a measure of construct validity for the ABS-MR and support for the use of facet theory in scale construction.

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TABLE 21.--Correlations<sup>1</sup> and significance levels between the six AES-ME attitude levels and values for Mexican-American SER<sup>2</sup>, FMR<sup>3</sup>, RST<sup>4</sup>, and PNR<sup>5</sup> groups.

Level	Stat.	SER	FMR	RST	PNR	Total Group	
						EFFICACY (Content)	
1	r	10	-.18	-.15	.32	.35	
	sig.	.49	-.21	.26	.63	.47	
2	r	11	-.16	.00	.15	.05	
	sig.	.45	.26	.10	.19	.46	
3	r	24	-.19	-.03	.10	.09	
	sig.	.09	.18	.81	.36	.19	
4	r	24	-.05	-.14	.15	.09	
	sig.	.08	.70	.32	.17	.19	
5	r	10	.07	-.09	.00	.02	
	sig.	.50	.63	.54	.10	.71	
6	r	-.03	-.04	-.05	.19	.08	
	sig.	.62	.76	.73	.69	.23	
Total	r	23	-.16	-.13	.16	.08	
	sig.	.10	.27	.36	.14	.25	

<sup>1</sup>Decimals omitted.

<sup>4</sup>Regular School Teachers.

<sup>2</sup>Special Education and Rehabilitation Workers.

<sup>5</sup>Parents of the Nonretarded.

<sup>3</sup>Parents of the Mentally Retarded.

TABLE 22.--Correlations<sup>1</sup> and significance levels between the six AES-MR attitude levels and knowledge variable for Mexican-American SER<sup>2</sup>, FMR<sup>2</sup>, RST<sup>2</sup>, and PNR<sup>2</sup> groups.

Variable	Stat.	KNOWLEDGE				Total Group
		SER	FMR	RST	FNR	
1	r	.27	-.02	.07	-.05	.06
	sig.	.05	.92	.60	.68	.34
2	r	.45	.21	.10	.04	.19
	sig.	.001	.14	.50	.75	.004
3	r	.31	-.05	.04	.12	.14
	sig.	.02	.73	.80	.26	.02
4	r	.41	-.09	.09	.11	.17
	sig.	.002	.54	.54	.31	.01
5	r	.13	-.07	-.02	-.07	.00
	sig.	.37	.60	.91	.51	.94
6	r	-.05	.16	-.08	.14	.12
	sig.	.71	.27	.57	.18	.06
Total	r	.44	.08	-.06	.09	.18
	sig.	.001	.59	.59	.44	.005

<sup>1</sup>Decimals omitted.

<sup>2</sup>See footnotes 2-5 in Table 11.

Table 3.-- Correlations and significance levels between the six ABS-MR attitude intensity levels and knowledge for Mexican-American Parents of the Mentally Retarded<sup>1</sup>

	Stat.	Stereo.	Norm.	Moral	Hypo.	Feel.	Action	Total
PMR <sup>1</sup>	v	30	25	14	16	21	14	28
	sig	03	08	31	25	14	33	04

TABLE 13.--Correlations<sup>1</sup> and significance levels between the six ABS-MR attitude intensity levels and amount of MR contact for Mexican-American SER<sup>2</sup>, PMR<sup>2</sup>, RST<sup>2</sup>, and PNR<sup>2</sup> groups.

ABS-MR Level	Stat.	SER	PMR	RST	PNR	Total Group	
						AMOUNT OF MR CONTACT	
1	r	.88	-.32	-.09	-.11	-.34	
	sig.	.56	.62	.52	.31	.58	
2	r	-.03	-.04	.03	-.15	-.13	
	sig.	.83	.80	.85	.18	.35	
3	r	-.04	-.06	.05	-.07	-.03	
	sig.	.78	.58	.71	.52	.49	
4	r	.19	.04	.23	.06	.04	
	sig.	.19	.79	.10	.61	.53	
5	r	-.07	.11	.05	.04	.03	
	sig.	.65	.45	.74	.70	.62	
6	r	-.27	-.04	.39	.40	.24	
	sig.	.05	.79	.004	.000	.000	
Total	r	-.03	-.07	.16	.06	.04	
	sig.	.83	.62	.26	.55	.53	

<sup>1</sup>Decimals omitted.

<sup>2</sup>See footnotes 2-5 in Table 11.

TABLE 45.--Multiple and partial correlations<sup>1</sup> between ABS-MR and contact variables for Mexican-Americans total group.<sup>2</sup>

Independent Variables	Societal Stereotypes		Societal Norm		Personal Moral Evaluative Behavior		Personal Psychological Behavior		Personal Feeling		Personal Interaction		Total	
	r	sig.	r	sig.	r	sig.	r	sig.	r	sig.	r	sig.		
HP amount	-.06	.40	-.02	.80	.02	.77	.00	.96	-.02	.80	.22	-.1	.51	.84
HP avoid.	-.03	.17	.10	.15	.11	.02	.12	.07	.16	.01	.30	-.00	.21	.002
HP income	-.04	.60	-.10	.13	-.08	.23	-.05	.46	-.13	.55	-.15	.01	-.15	.02
HP alter.	-.05	.45	-.11	.11	.10	.15	.32	.63	.06	.40	.54	.02	.01	.90
MR amount	-.01	.89	-.09	.20	-.08	.22	-.04	.50	.03	.65	-.13	.03	-.03	.20
MR enjoy	.00	.94	.14	.03	.00	.99	.76	.26	-.07	.30	.17	.02	.02	.19
Multiple R	.13	.70	.22	.07	.17	.37	.20	.17	.23	.04	.42	-.00	.29	.004

<sup>1</sup>Decimals omitted.

<sup>2</sup>N = 232.

TABLE 26.--Multiple and partial correlations<sup>1</sup> between ABS-NR and contact variables for Mexican-American SER<sup>2</sup> group 3.

Independent Variables	Societal Stereotypic Norm		Personal Moral Evaluative Behavior		Personal Agentic Behavior		Personal Feeling		Personal Interaction		Total	
	r	sig.	r	sig.	r	sig.	r	sig.	r	sig.	r	sig.
HP amount	-.04	.76	.12	.44	-.15	.31	.62	.63	.14	.37	.14	.43
HP avoid.	-.03	.86	.23	.35	.21	.35	.24	.35	.24	.32	.28	.06
HP income	-.21	.16	-.14	.11	-.37	.11	-.25	.28	-.27	.06	-.11	-.29
p alter.	.24	.12	.25	.24	.34	.24	.62	.62	.24	.15	.24	.32
MR amount	.13	.39	.63	.85	-.05	.72	.17	.17	.24	.49	.17	-.04
MR enjoy	-.14	.35	-.51	.04	-.51	.04	.53	.63	-.43	.031	.31	.23
Multiple R	.35	.43	.38	.33	.32	.22	.30	.64	.32	.32	.32	.54

<sup>1</sup>Decimals omitted.

<sup>2</sup>Special education and rehabilitation workers.

<sup>3</sup>N = 50.

TABLE 27.—Multiple and partial correlations<sup>1</sup> between ABS-NR and contact variables for Negro-American  
families.

Independent Variables	Societal Stereotypic		Personal normative		Personal hypothetical		Personal behavior		Total	
	r	sig.	r	sig.	r	sig.	r	sig.	r	sig.
HP amount	.08	.60	-.25	.24	-.15	.45	.24	.35	.03	.50
HP avoid.	-.13	.52	.35	.76	-.22	.47	-.27	.37	.21	.52
HP income	-.25	.69	.57	.53	.20	.53	.33	.55	-.27	.56
HP alter.	.14	.34	.18	.25	-.07	.65	.14	.36	.05	.39
MR amount	.10	.51	.17	.27	.08	.25	-.23	.13	.05	.27
MR enjoy	.01	.95	.05	.73	-.37	.65	.10	.52	-.51	.03
Multiple R	.32	.30	.45	.42	.33	.65	.36	.40	.27	.57

<sup>1</sup>Decimals omitted.

<sup>2</sup>Parents of the mentally retarded.

<sup>3</sup>N = 50.

TABLE 8. - Multiple and partial correlations between income, sex, contact variables for Mexican-American parents.

Independent Variables	Societal Stereotype		Societal Norm		Personal Income		Personal Education		Personal Action		Total	
	R	Sign.	R	Sign.	R	Sign.	R	Sign.	R	Sign.	R	Sign.
HP amount	.66	**	.67	**	-.24	**	.35	**	.63	**	.67	**
HP avoid.	-.15	ns	.57	**	.24	**	.40	**	.64	**	.67	**
HP income	-.25	ns	-.26	**	.62	**	.62	**	.64	**	.68	**
HP alter.	-.24	**	.16	ns	.64	**	.61	**	.65	**	.62	**
MR amount	.25	**	.27	**	-.22	**	.27	**	.65	**	.67	**
MR enjoy	.06	ns	.37	**	.27	**	.32	**	.40	**	.37	**
Multiple R	3.8	3.2	5.1	5.4	4.2	4.3	2.7	2.7	2.4	2.5	3.7	3.3

<sup>1</sup>Decimals omitted.

<sup>2</sup>Regular school teachers.

<sup>3</sup>N = 50.

TABLE 2.—Multiple and partial correlations between income and contact variables for Mexican-Americans.

Independent Variables	Societal Norm		Stereotypic		Societal Norm		Personal Acquisitive		Personal Intrinsic		Personal Feelings		Personal Incentivical Behavior		Total	
	r	sig.	r	sig.	r	sig.	r	sig.	r	sig.	r	sig.	r	sig.	r	sig.
HP amount	-20	.08	.04	.70	.01	.45	-.32	.35	-.12	.28	.24	.21	-.04	.93		
HP avoid.	.04	.70	.02	.89	.00	.23	.53	.79	.19	.16	.25	.22	.24	.33		
HP income	.41	.0005	.16	.17	.34	.72	-.25	.23	.08	.27	-.07	.32	.26	.17		
HP alter.	.04	.76	-.29	.01	-.06	.60	.04	.76	.00	.09	.05	.02	-.07	.56		
MR amount	.09	.41	-.07	.57	-.06	.63	-.04	.72	-.12	.31	.03	.02	-.05	.70		
MR enjoy.	.08	.50	.26	.02	.14	.23	.17	.15	.04	.72	.15	.13	.13	.10		
Multiple R	.47	.003	.36	.09	.17	.30	.28	.41	.23	.64	.31	.05	.23	.42		

1 Decimals omitted.

2 parents of the nonretarded.

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TABLE 12  
RELATIONSHIP  
BETWEEN THE  
NUMBER OF  
INTERVIEWERS  
AND THE  
NUMBER OF  
INTERVIEWED  
SUBJECTS.

Number of Interviewers	Number of Interviewed Subjects							
	100	200	300	400	500	600	700	800
100	100	200	300	400	500	600	700	800
200	100	200	300	400	500	600	700	800
300	100	200	300	400	500	600	700	800
400	100	200	300	400	500	600	700	800
500	100	200	300	400	500	600	700	800
600	100	200	300	400	500	600	700	800
700	100	200	300	400	500	600	700	800
800	100	200	300	400	500	600	700	800

TABLE 13  
RELATIONSHIP  
BETWEEN THE  
NUMBER OF  
INTERVIEWERS  
AND THE  
NUMBER OF  
INTERVIEWED  
SUBJECTS.

TABLE 14  
RELATIONSHIP  
BETWEEN THE  
NUMBER OF  
INTERVIEWERS  
AND THE  
NUMBER OF  
INTERVIEWED  
SUBJECTS.

TABLE 4--Sample size, means, adjusted means and significance test results for the four Mexican-American sample groups on the ABS-MR.

Variable	N	M	Adj. M	SER			PMR			RST			PNR		
				N	M	Adj. M	N	M	Adj. M	N	M	Adj. M	N	M	Adj. M
Attitude	1. Stereotype	50	31	31	50	35	35	50	34	34	82	34	34		
Content	2. Normative	50	36	36	50	40	40	50	36	36	82	34	34		
	3. Moral Evalu.	50	40	40	50	47	47	50	45	45	82	43	43		
	4. Hypothetical	50	46	46	50	49	49	50	44	44	82	44	44		
	5. Perceiving	50	40	40	50	43	43	50	39	39	82	40	40		
	6. Action	50	35	35	50	39	39	50	39	39	82	29	30		
	7. Total	50	235	235	50	264	264	50	227	227	82	228	225		
Attitude	8. Stereotype	50	43	43	50	47	47	50	40	41	82	42	42		
Intensity	9. Normative	50	40	40	50	45	45	50	41	41	82	43	42		
	10. Moral Evalu.	50	45	45	50	48	48	50	46	46	82	46	46		
	11. Hypothetical	50	47	46	50	48	48	50	48	48	82	47	47		
	12. Perceiving	50	50	50	50	49	49	50	48	48	82	47	47		
	13. Action	50	43	44	50	46	47	50	31	32	82	34	35		
	14. Total	50	269	269	50	264	265	50	254	255	82	259	259		
Value	15. BPPIntensity-Cont.	50	23	23	50	24	24	50	24	24	82	23	23		
	16. BPPIntensity-Int.	50	28	29	50	28	28	50	28	28	82	28	28		
Knowledge	17. M. Attitudes	50	16	16	50	17	17	50	16	16	82	16	17		
Content	18. M. Attitudes	50	4	3	50	4	3.3	50	3	3.7	82	4	3.8		
	19. M. Attitudes	50	4	4.2	50	2	4.2	50	2	4.4	82	2	3		
	20. M. Attitudes	50	3	2.9	50	2	1.1	50	3	1.4	82	3	1.2		
	21. M. Attitudes	50	3	4.1	50	1	1.2	50	1	1.2	82	1	1.4		
	22. M. Attitudes	50	4	4.9	50	1	1.6	50	1	1.4	82	1	1.7		
	23. M. Attitudes	50	6	6	50	7	4.4	50	1	1.8	82	2	2.3		
Demographic	24. Age	50	1	0.5	50	1	3.8	50	1	2.7	78	1	2.8		
Attitudes	25. Attitudes-Amount	50	4	4.4	50	4	3	50	4	5	81	4	3.7		
	26. Belief-Perception	50	2	4.2	50	2	4.5	50	2	4.2	77	2	4.3		
	27. Belief-Adher.	50	2	4.2	50	2	4.2	50	2	4.2	77	2	4.2		
Change	28. Belief-Change	50	4	2.4	50	3	2.4	50	5	2.4	82	4	2.3		
Orientation	29. Child Rearing	50	2	3.1	50	2	3.2	50	2	3.3	82	2	3.2		
	30. Birth Control	50	3	2.8	50	3	2.4	50	3	2.9	79	3	2.94		
	31. Automation	50	2	3.1	50	2	3.2	50	3	3.5	82	3	3.3		
	32. Political Invol.	50	3	2.9	50	3	2.94	50	4	3.1	82	3	2.5		
	33. Rule Adher.	50	4	2.6	50	4	2.2	50	4	2.5	82	2	2.7		
Education	34. Local Aid	50	3	3	50	3	3	50	3	3.3	80	3	3.2		
	35. Federal Aid	50	3	3.2	50	3	2.8	50	3	3.1	82	3	3.2		
	36. Ed. Planning	50	3	2.6	50	3	2.6	50	3	2.6	82	3	2.6		

Male				Female				Group	Fdr. of	Multiple Means
N	M	Adj. M	N	M	Adj. M	F	E	Tent <sup>a</sup>		
76	35	35	150	33	33	3.81	.01	M>F, R>S, R>N		
76	36	36	150	36	36	7.94	.0005	R>S, R>T, R>N		
76	40	40	150	40	40	5.01	.002	R>S, R>N		
76	40	40	150	40	40	7.19	.0005	R>S, R>T, R>H		
76	41	41	150	41	41	4.03	.002	H>T, H>N, R>T, R>N		
76	33	33	150	33	33	30.75	.0005	S>P, R>S, S>H, R>T, R>N, T>N		
76	29	29	150	23	23	17.63	.0005	R>S, R>T, R>H		
76	43	43	150	43	43	5.04	.002	R>S, R>T, R>H		
76	41	41	150	42	42	2.82	.08	R>S, R>T, R>H		
76	46	46	150	46	46	1.95	.275			
76	46	46	150	48	48	.46	.625			
76	48	48	150	48	48	1.06	.365			
76	38	38	150	39	39	25.61	.0005	R>T, H>N, R>P, H>T, R>N		
76	262	264	150	266	267	6.19	.002	R>T, H>N		
76	24	24	150	23	23	.756	.52			
76	28	28	150	28	28	4.12	.02			
76	16	16	150	17	17	2.54	.114	F>P		
76	2	2.1	150	2	2.1	21.83	.0005	S>R, S>L, S>H, R>T, T>N, R>N		
76	3	3.1	150	3	3.1	15.73	.0005	T>P, T>H, R>T, N>T, R>N		
76	2	1.6	150	2	1.6	58.76	.0005	H>T, S>R, S>H, T>R, N>R		
76	2	2.0	150	2	2.0	100.13	.0005	S>T, H>P, S>H, N>T, N>R		
76	1	1.1	150	1	1.1	81.77	.0005	H>P, H>R, S>N, N>T		
76	3	3.1	150	3	3	63.74	.0005	S>T, T>H, R>P, H>T, R>N		
76	3	3	150	3	3	15.79	.0005	H>P, T>H, R>S, H>S, R>T, R>N		
76	6	6.1	150	6	6.1	64.16	.0005	T>S, H>R, S>N, T>R, N>T, N>R		
76	4	4	150	4	4	.16	.93	F>M		
76	6	6	150	6	6	.14	.93	F>M		
76	2	2.3	150	2	2.4	.51	.36			
76	3	3.1	150	3	3.2	1.52	.76			
76	2	2.6	150	2	2.7	6.37	.0005	T>S, N>S, T>R, N>R		
76	3	3.3	150	3	3.2	1.73	.95	T>S, T>R, T>N		
76	2	2.8	150	2	2.6	3.31	.02	T>N		
76	3	2.7	147	2	2.4	2.79	.04	S>R, N>R		
76	3	3.2	150	3	3.1	1.67	.82			
76	3	3.1	150	3	3.1	1.08	.42	S>R, N>R		
76	3	2.6	150	3	2.6	1.19	.51			

<sup>a</sup>S=SRR, R=PRR, T=RST, N=PNR.

<sup>b</sup>p<.05

TABLE 12.---Correlations<sup>1</sup> and significance levels between the six ABS-MR structure levels and government aid to education for Mexican-American SER<sup>2</sup>, PNR<sup>2</sup>, RST<sup>2</sup>, and PNR<sup>2</sup> groups.

Level	Stat.	SER	PNR	RST	GOVERNMENT AID					
					TC <sub>1</sub>	TC <sub>2</sub>	PNR	TC <sub>1</sub>	TC <sub>2</sub>	PNR
1	$t_{12} = 5.60$	-0.1	1.3	0.2	14	69	69	22	23	23
	$t_{13} = 5.60$	0.3	2.5	87						
2	$t_{23} = 5.60$	2.8	-2.3	0.2	15	66	66	1.9	3.5	3.5
	$t_{24} = 5.60$	0.4	-0.4	9.2						
3	$t_{34} = 5.60$	0.4	-0.3	2.3	30	142	142	0.6	0.6	0.6
	$t_{35} = 5.60$	5.0	0.5	10						
4	$t_{45} = 5.60$	0.6	0.7	0.2	16	66	66	1.7	3.9	3.9
	$t_{46} = 5.60$	0.7	0.7	87						
5	$t_{56} = 5.60$	-1.9	3.0	39	82	112	112	1.0	1.0	1.0
	$t_{57} = 5.60$	1.7	0.3	0.04						
6	$t_{67} = 5.60$	-0.8	-0.2	0.0	1.0	66	66	3.6	3.6	3.6
	$t_{68} = 5.60$	0.6	0.5	0.0						
Total	$t_{123456} = 5.60$	0.0	1.2	18	26	124	124	0.2	0.2	0.2
		57	40	20						

<sup>1</sup>Decimals omitted.

<sup>2</sup>See footnotes 2-5 in Table 11.

Table 13. - Correlations<sup>1</sup> and significance levels between the six achievement levels and educational attainments of Mexican-American boys, girls, and Negro groups.

Level	Stat.	EDUCATIONAL ATTAINMENTS						
		1	2	3	4	5	6	7
1	r <sup>1</sup> sig. 2	.41 .15 .04	.41 .16 .04	.41 .16 .04	.41 .16 .04	.41 .16 .04	.41 .16 .04	.41 .16 .04
2	r <sup>1</sup> sig. 3	.41 .16 .04	.41 .16 .04	.41 .16 .04	.41 .16 .04	.41 .16 .04	.41 .16 .04	.41 .16 .04
3	r <sup>1</sup> sig. 4	.41 .16 .04	.41 .16 .04	.41 .16 .04	.41 .16 .04	.41 .16 .04	.41 .16 .04	.41 .16 .04
4	r <sup>1</sup> sig. 5	.41 .16 .04	.41 .16 .04	.41 .16 .04	.41 .16 .04	.41 .16 .04	.41 .16 .04	.41 .16 .04
5	r <sup>1</sup> sig. 6	.41 .16 .04	.41 .16 .04	.41 .16 .04	.41 .16 .04	.41 .16 .04	.41 .16 .04	.41 .16 .04
6	r <sup>1</sup> sig. 7	.41 .16 .04	.41 .16 .04	.41 .16 .04	.41 .16 .04	.41 .16 .04	.41 .16 .04	.41 .16 .04
Total								

<sup>1</sup> Decimals omitted.

<sup>2</sup> See footnotes 2-5 in Table 11.

TABLE 14.---Analyses of simplex correlations<sup>1</sup> of the ABS-AB for the Mexican-American See, End, Run, and End samples.<sup>2</sup>

Descriptive Term	SERVIC Sample <sup>3</sup>						END-AB Sample <sup>4</sup>						END-EC Sample <sup>5</sup>						END-EE Sample <sup>6</sup>						
	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	
<u>Reversal <math>\alpha = .55</math></u>																									
Societal stereo.	1	--																							
Societal Norm	2	<u>35</u>	--																						
Personal Moral Ev.	3	<u>20</u>	<u>53</u>	--																					
Personal Hypo. Act.	4	<u>18</u>	<u>51</u>	<u>66</u>	--																				
Personal Feeling	5	<u>11</u>	<u>32</u>	<u>14</u>	<u>51</u>	--																			
Personal Action	6	<u>10</u>	<u>21</u>	<u>10</u>	<u>12</u>	<u>31</u>	--																		
<u>Best <math>\alpha = .55</math></u>																									
Examine each matrix for "order" of leveis	1	--																							
	2	<u>51</u>	--																						
	3	<u>51</u>	<u>66</u>	--																					
	4	<u>35</u>	<u>18</u>	<u>20</u>	--																				
	5	<u>01</u>	<u>16</u>	<u>10</u>	<u>10</u>	--																			
	6	<u>02</u>	<u>01</u>	<u>14</u>	<u>11</u>	<u>31</u>	--																		

<sup>1</sup>Reversals are underlined.

<sup>2</sup>See text for sample description.

<sup>3</sup>Critical value of  $r$  at .05 level = .27.

<sup>4</sup>Critical value of  $r$  at .05 level = .27.

<sup>5</sup>Critical value of  $r$  at .05 level = .27.

<sup>6</sup>Critical value of  $r$  at .05 level = .21.